CLAIMS

1. A high tension transformer which is characterized in that the conventional elements it is comprised of, are arranged in two differentiated groups, on the one hand the elements with positive voltages (1-5 and 7) and, on the other, the elements with negative voltages (1'-5' and 7'), being both separated from each other by insulating means; and whereby it is foreseen that one of the ends of all the elements has ground level or "zero tension", this latter progressively increasing towards the opposed end in the elements with positive tensions and decreasing progressively in the elements with negative tensions; all this in such a manner that, at and equal level or distance from the ground level, the elements of each group have equipotential voltages.

2. A high tension transformer according to claim 1, characterized in that the progressive increase of the tension in the elements with positive tension and the progressive decrease of the tension in the elements with negative tension, is linear.

3. A high tension transformer according to claim 1, characterized in that the level of "zero tension" is located in correspondence with the signals of the low tension input (10).

4. A high tension transformer according to claim 3, characterized in that the level of "zero tension" is located at the upper side (9) of the transformer.

5, A high tension transformer according to any of the preceding claims, characterized in that the maximum level of potential is defined at the lower ends of the high tension switches (5,5').

6. A high tension transformer according to claim 1, characterized in that the two groups are separated by a single insulating barrier (6).

7. A high tension transformer according to claim 1, characterized in that it includes means for minimizing the stray capacitances between the elements of one group and those of the other.

8. A high tension transformer according to claim 7, characterized in that the means for minimizing the steray capacitances between the elements of one group and those of the other, are determined by an arrangement of said elements, such that the elements of one group have only a very small surface opposed to the elements of the other group.